Maryland Historical Trust

Maryland Inventory of Historic Properties Number: G-II-A-136

Name: Old Morgantown Rd over Buffalo Run

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridged received the following determination of eligibly.

MARYLAND HISTORICAL TRUST

Eligibility Recommended ___X___ Eligibility Not Recommended _____

Criteria: ___A ___B ___C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G __None

Comments: _____

_____

_____

Reviewer, OPS: __Anne E. Bruder_____ Date: __3 April 2001_____

Reviewer, NR Program: _Peter E. Kurtze_____ Date: ___3 April 2001_____

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. G-II-A-136

SHA Bridge No. G 76 Bridge name Old Morgantown Road over Buffalo Run

LOCATION:
Street/Road name and number Old Morgantown Road

City/town Sand Spring Vicinity X

County Garrett

This bridge projects over: Road__ Railway_____ Water X Land _____

Ownership: State _____ County X Municipal _____ Other _____

HISTORIC STATUS:
Is the bridge located within a designated historic district? Yes _____ No X
National Register-listed district _____ National Register-determined-eligible district _____
Locally-designated district _____ Other _____

Name of district _____

BRIDGE TYPE:
Timber Bridge _:
Beam Bridge _____ Truss -Covered _____ Trestle _____ Timber-And-Concrete _____

Stone Arch Bridge _____

Metal Truss Bridge _____

Movable Bridge :
Swing _____ Bascule Single Leaf _____ Bascule Multiple Leaf _____
Vertical Lift _____ Retractile_____ Pontoon _____

Metal Girder_____:
Rolled Girder _____ Rolled Girder Concrete Encased _____
Plate Girder _____ Plate Girder Concrete Encased _____

Metal Suspension _____

Metal Arch _____

Metal Cantilever _____

Concrete X :
Concrete Arch X Concrete Slab_____ Concrete Beam _____ Rigid Frame _____

Other _____ Type Name _____

DESCRIPTION:

Setting: Urban _____ **Small town** _____ **Rural** ____X____

Describe Setting:

Bridge No. G 76 carries Old Morgantown Road over Buffalo Run in Garrett County. Old Morgantown Road runs east-west and Buffalo Run flows south. The bridge is located in the vicinity of Friendsville, and is surrounded by woods and some single family homes.

Describe Superstructure and Substructure:

Bridge No. G 76 is a single-span, 2-lane, concrete arch bridge. The bridge was originally built in 1919. The structure is 33 feet 11 inches long and has a clear roadway width of 15 feet 8 inches. The out-to-out width is 16 feet 11 inches. The superstructure consists of 1 arch that supports a concrete deck and concrete parapets. The arch spans 30 feet with a clear height of 5 feet 7 inches. The arch is a filled concrete spandrel arch. The fill is 20 inches thick and it has a bituminous wearing surface. The structure has solid panel parapets and the roadway approaches have sharp curves. A date plaque on the parapet states that the bridge was built in 1919 by the Luten Bridge Company. The substructure consists of 2 abutments. There are 4 flared concrete wingwalls. The bridge is not posted, and has a sufficiency rating of 76.4.

According to the 1995 inspection report, this structure was in good condition with light cracking. The asphalt wearing surface has tire grooves. The concrete is lightly cracked. The arches are lightly spalled with exposed reinforcement bars near the crown. The spandrel walls are also spalled at the water line. The abutments and wingwalls are in good condition. Also, the southeast corner parapet has collision damage. Otherwise, the parapets are in good condition.

Discuss Major Alterations:

This bridge has had no major alterations.

HISTORY:

WHEN was the bridge built: ____1919____
This date is: Actual _____X_____ **Estimated** _____
Source of date: Plaque __X__ **Design plans** _____ **County bridge files/inspection form** ___**Other (specify):**

WHY was the bridge built?

The bridge was constructed in response to the need for more efficient transportation network and increased load capacity.
WHO was the designer? Luten Bridge Company
WHO was the builder? Luten Bridge Company
WHY was the bridge altered? N/A
Was this bridge built as part of an organized bridge-building campaign?
There is no evidence that the bridge was built as part of an organized bridge building campaign.

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:
A - Events _____ **B- Person** _____
C- Engineering/architectural character ___X_____

This bridge was determined eligible by the Interagency Review Committee in February 1996.

Was the bridge constructed in response to significant events in Maryland or local history?

The advent of modern concrete technology fostered a renaissance of arch bridge construction in the United States. Reinforced concrete allowed the arch bridge to be constructed with much more ease than ever before and maintained the load-bearing capabilities of the form. As the structural advantages of reinforced concrete became apparent, the heavy, filled barrel of the arch was lightened into ribs. Spandrel walls were opened, to give a lighter appearance and to decrease dead load. This enabled the concrete arch to become flatter and multi-centered, with longer spans possible. Designers were no longer limited to the semicircular or segmental arch form of the stone arch bridge. The versatility of reinforced concrete permitted development of a variety of economical bridges for use on roads crossing small streams and rivers.

Maryland's roads and bridge improvement programs mirrored economic cycles. The first road improvement of the State Roads Commission was a 7 year program, starting with the Commission's establishment in 1908 and ending in 1915. Due to World War 1, the period from 1916-1920 was one of relative inactivity; only roads of first priority were built. Truck traffic resulting from war related factories and military installations generated new, heavy traffic unanticipated by the builders of the early road system. From 1920-1929, numerous highway improvements occurred in response to the increase in Maryland motor vehicles from 103,000 in 1920 to 320,000 in 1929, with emphasis on the secondary system of feeder roads that moved traffic from the primary roads built before World War I. After World War I, Maryland's bridge system also was appraised as too narrow and structurally inadequate for the increasing traffic , with plans for an expanded bridge program to be handled by the Bridge Division, set up in 1920. In 1920 under Chapter 508 of the Acts of 1920 the State issued a bond of $3,000,000.00 for road construction; the primary purpose of these monies was to meet the state obligations involving the construction of rural post roads. The secondary purpose of these monies was to fund (with an equal sum from the counties) the building of lateral roads. The number of hard surfaced roads on the state system grew from 2000 in 1920 to 3200 in 1930. By 1930, Maryland's primary system had been inadequate to the huge freight trucks and volume of passenger cars in use, with major improvements occurring in the late 1930's. Most improvements to local roads waited until the years after World War 1.

As the nation's automotive traffic increased in the early twentieth century, local road networks were consolidated, and state highway departments were formed to supervise the construction and improvement of state roads. With a diverse topographical domain encompassing numerous small and large crossings, Maryland engineers quickly recognized the need for expedient design and construction through the standardization of bridge designs.

The concept and practice of standardization was one of the most important developments in engineering of the twentieth century. In Maryland, as in the rest of the nation, the standardized concrete types became the predominant bridge types built. In the period 1911 to 1920 (the decade in which standardized plans were introduced), beams and slabs constituted 65 percent and arches 35 percent of the extant 29 bridges built in Maryland. In the following decade, 1921-1930, the beam (now the T-beam) and slab increased to 73 percent and the arch had declined to 27 percent of the 129 extant bridges; in the next decade (1931-1940), the beam and slab achieved 82 percent and arches had further declined, constituting only 18 percent of the total of extant bridges built on state-owned roads between 1931 and 1946.

Although beam and slab bridges became the utilitarian choice, it appears that the arch was selected when aesthetics as well as other site conditions were considered. The architectural treatment of extant arch bridges supports this assessment. Many of these bridges were multiple span structures with open spandrels or masonry facing. Another decorative feature of the concrete arch bridge was an open, balustrade-style parapet. Despite the popularity of ornamental arches and the increase in use of beam and slab bridges, examples of simpler, single and multiple span closed concrete arch bridges with solid parapets continued to be constructed throughout the early twentieth century.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?

There is no evidence that the construction of this bridge had a significant impact on the growth and development of this area.

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Is the bridge located in an area that may be eligible for historic designation and would the bridge add to or detract from the historic/visual character of the potential district?

The bridge is located in an area that does not appear to be eligible for historic designation.

Is the bridge a significant example of its type?

The bridge is a potentially significant example of a concrete arch bridge, possessing a high degree of integrity.

Does the bridge retain integrity of important elements described in Context Addendum?

The bridge retains the character-defining elements of its type, as defined by the Statewide Historic Bridge Context, including the arch, spandrel walls, parapets, abutments, and wingwalls, however some deterioration is evident.

Is the bridge a significant example of the work of a manufacturer, designer, and/or engineer?

This bridge is a significant example of the work of the Luten Bridge Company of York, Pennsylvania. The company was incorporated in 1909 as a contracting concern specializing in the designs of Daniel Luten. It grew to be the largest of Luten's loosely affiliated corporations and operated offices in Clarksburg, WV; Concord, NH; Columbus, OH; Chatsworth, GA; and Syracuse, NY. Daniel Luten specialized in reinforced concrete bridges. His designs dominated the industry and were copied (under patent protection) and used throughout the eastern United States.

Should the bridge be given further study before an evaluation of its significance is made?

No further study of this bridge is required to evaluate its significance.

BIBLIOGRAPHY:

County inspection/bridge files X **SHA inspection/bridge files** _____
Other (list):

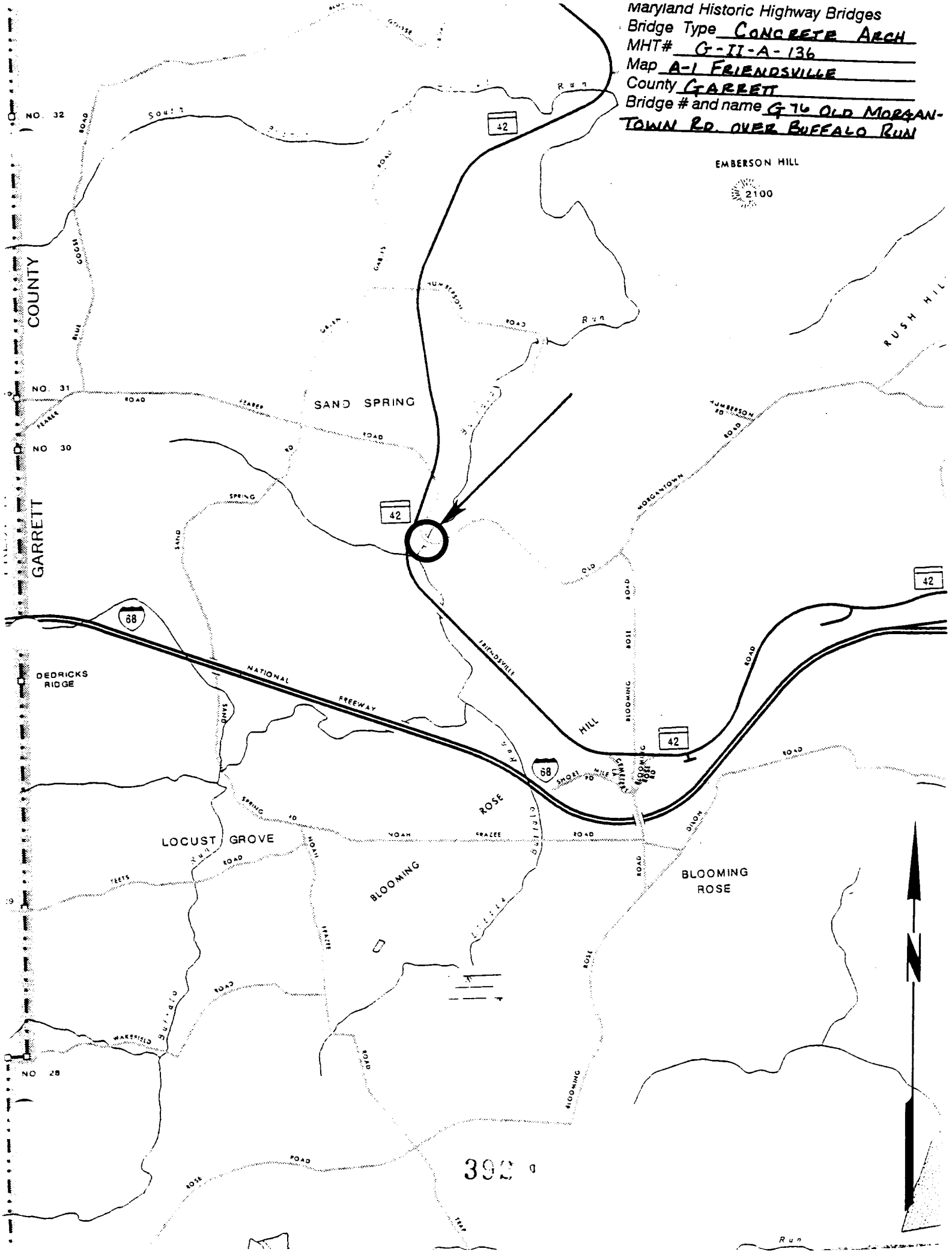
Johnson, Arthur Newhall
1899 The Present Condition of Maryland Highways. In *Report on the Highways of Maryland.* Maryland Geological Survey, The Johns Hopkins University Press, Baltimore.

P.A.C. Spero & Company and Louis Berger & Associates
1995 Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report. Maryland State Highway Administration, Maryland State Department of Transportation, Baltimore, Maryland.

Tyrrell, H. Grattan
1909 *Concrete Bridges and Culverts for Both Railroads and Highways.* The Myron C. Clark Publishing Company, Chicago and New York.

SURVEYOR:

Date bridge recorded December 1997
Name of surveyor Wallace, Montgomery & Associates / P.A.C. Spero & Company
Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Baltimore, MD 21204
Phone number (410) 296-1635 **FAX number** (410) 296-1670


Maryland Historic Highway Bridges
Bridge Type CONCRETE ARCH
MHT# G-II-A-136
Map A-1 FRIENDSVILLE
County GARRETT
Bridge # and name G 76 OLD MORGAN-TOWN RD. OVER BUFFALO RUN
EMBERSON HILL
2100
COUNTY
GARRETT
NO. 32
NO. 31
NO 30
NO 28
SAND SPRING
LOCUST GROVE
BLOOMING ROSE
DEDRICKS RIDGE
NATIONAL FREEWAY
FRIENDSVILLE
RUSH HILL
42
68

SR # 2007610
OVER BUFFALO RUN
GARRETT CO. Md.
Charles Ziegler
11/26/95
-SHA

G-II-A-136

SOUTHEAST APPROACH

log 1

BRH 20G-1610

G-II-A-136

OVER BUFFALO RUN

GARRETT CO MD

CHARLES ZIEGLER

11/26/95

SHA

NORTHWEST APPROACH

2 of 4

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NORTHEAST ELEVATION (DOWNSTREAM)

G-II-A-136

BR # [illegible]
OVER BUFFALO RUN
[illegible] CO. MD
CHARLES [illegible]
1995
SHA

SOUTHWEST ELEVATION (UPSTREAM)

G-II-A-136
Buffalo Run Bridge #2
Sand Spring
Public

1919

This single-lane, reinforced concrete deck bridge spans Buffalo Run on the Old Morgantown Road east of MD Route 42. A manufacturer's plate appears on the S wall of the bridge. On the N wall appears a plate with the names of the county commissioners and the clerk of the court at the time of the bridge's erection.

MARYLAND HISTORICAL TRUST

G-II-A-136
MAGI #1204335717
M

INVENTORY FORM FOR STATE HISTORIC SITES SURVEY

1 NAME

HISTORIC

AND/OR COMMON
Buffalo Run Bridge #2

2 LOCATION

STREET & NUMBER
Old Morgantown Rd., approximately 2/10 miles SE of MD Route 42

CITY, TOWN
Sand Spring

X VICINITY OF

CONGRESSIONAL DISTRICT
6th

STATE
Maryland

COUNTY
Garrett County

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
__DISTRICT	XPUBLIC	XOCCUPIED	__AGRICULTURE	__MUSEUM
__BUILDING(S)	__PRIVATE	__UNOCCUPIED	__COMMERCIAL	__PARK
XSTRUCTURE	__BOTH	__WORK IN PROGRESS	__EDUCATIONAL	__PRIVATE RESIDENCE
__SITE	**PUBLIC ACQUISITION**	**ACCESSIBLE**	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	__YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
	__BEING CONSIDERED	XYES: UNRESTRICTED	__INDUSTRIAL	XTRANSPORTATION
		__NO	__MILITARY	__OTHER

4 OWNER OF PROPERTY

NAME

Telephone #:

STREET & NUMBER

CITY, TOWN

STATE, zip code

___ VICINITY OF

5 LOCATION OF LEGAL DESCRIPTION

Liber #:
Folio #:

COURTHOUSE, REGISTRY OF DEEDS, ETC.
Garrett County Courthouse

STREET & NUMBER
Third and Alder Streets

CITY, TOWN
Oakland

STATE
Maryland 21550

6 REPRESENTATION IN EXISTING SURVEYS

TITLE
None

DATE

__FEDERAL __STATE __COUNTY __LOCAL

DEPOSITORY FOR SURVEY RECORDS

CITY, TOWN

STATE

7 DESCRIPTION

G-II-A-136

CONDITION		CHECK ONE	CHECK ONE
_EXCELLENT	_DETERIORATED	XUNALTERED	XORIGINAL SITE
_GOOD	_RUINS	_ALTERED	_MOVED DATE_____
XFAIR	_UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

This single-lane, reinforced-concrete deck bridge spans Buffalo Run on the Old Morgantown Road east of MD Route 42. A manufacturer's plate appears on the S wall of the bridge. On the N wall appears a plate with the names of the county commissioners and the clerk of the court at the time of the bridge's erection.

CONTINUE ON SEPARATE SHEET IF NECESSARY

8 SIGNIFICANCE

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PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
__PREHISTORIC	__ARCHEOLOGY-PREHISTORIC	__COMMUNITY PLANNING	__LANDSCAPE ARCHITECTURE	__RELIGION	
__1400-1499	__ARCHEOLOGY-HISTORIC	__CONSERVATION	__LAW	__SCIENCE	
__1500-1599	__AGRICULTURE	__ECONOMICS	__LITERATURE	__SCULPTURE	
__1600-1699	__ARCHITECTURE	__EDUCATION	__MILITARY	__SOCIAL/HUMANITARIAN	
__1700-1799	__ART	__ENGINEERING	__MUSIC	__THEATER	
__1800-1899	__COMMERCE	__EXPLORATION/SETTLEMENT	__PHILOSOPHY	X TRANSPORTATION	
X 1900-	__COMMUNICATIONS	__INDUSTRY	__POLITICS/GOVERNMENT	__OTHER (SPECIFY)	
		__INVENTION			

SPECIFIC DATES 1919

BUILDER/ARCHITECT Luten Bridge Company

STATEMENT OF SIGNIFICANCE

The manufacturer's plate on the S wall of the bridge identifies it as the work of Daniel S. Luten, a bridge fabricator of York, PA.

CONTINUE ON SEPARATE SHEET IF NECESSARY

G-II-A-136

9 MAJOR BIBLIOGRAPHICAL REFERENCES

CONTINUE ON SEPARATE SHEET IF NECESSARY

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY _____

VERBAL BOUNDARY DESCRIPTION

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	COUNTY
STATE	COUNTY

11 FORM PREPARED BY

NAME / TITLE

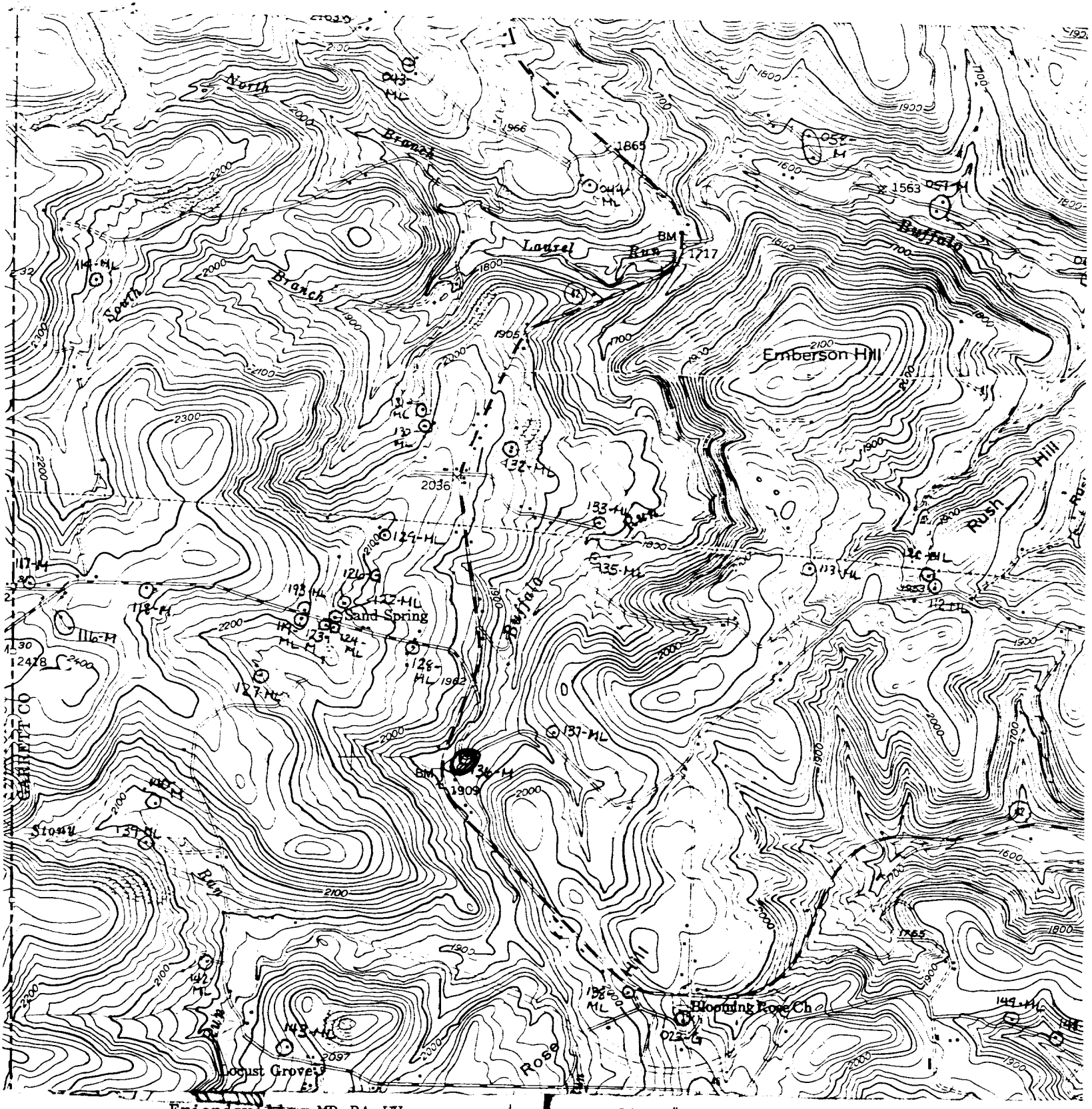
Ann Burns, Historic Sites Surveyor

ORGANIZATION	DATE
Maryland Historical Trust/Bureau of Mines	April, 1981
STREET & NUMBER	TELEPHONE
Shaw House, 21 State Circle	(301) 269-2438
CITY OR TOWN	STATE
Annapolis,	Maryland 21401

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature, to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 Supplement.

The Survey and Inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

RETURN TO: Maryland Historical Trust
The Shaw House, 21 State Circle
Annapolis, Maryland 21401
(301) 267-1438



Friendsville, MD-PA-WV
USGS 7.5 minute series
Scale-1:24,000
1947; photorevised 1974

Site #: G-II-A-136
Buffalo Run Bridge #2
Old Morgantown Rd., approximately
.2 miles SE of MD Route 42

G-II-A-136
Buffalo Run Bridge #2
Garrett Co., MD
Photo: A. Burns 3 Oct. 1980
looking W.


1919
LUTEN BRIDGE CO.
YORK, PA.

G-II-A-136
Buffalo Run Bridge #2
Garrett Co., MD
Photo: A. Burns 3 Oct. 1980
Manufacturer's plate